



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/346,283 07/01/99 FLANNERY

M 450,202US1

MMC2/1214
SCHWEGMAN LUNDBERG WOESSNER & KLUTH PA
PO BOX 2938
MINNEAPOLIS MN 55402

EXAMINER

BLAZ, J

ART UNIT

PAPER NUMBER

2815

DATE MAILED:

12/14/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/346,283

Applicant(s)

FLANNERY, MICHAEL R.

Examiner

José R. Díaz

Art Unit

2815

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 20) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

➤ The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

➤ Claim 1 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Parkhurst et al. (US Patent No. 5,412,372).

Regarding claims 1 and 7, Parkhurst et al. disclose an integrated circuit (Figure 10) with a micromechanical element (380) comprising a support substrate (dash lines) supporting a sensor element (374), a logic circuit (350), and a semiconductor visual display element (360), the sensor element electrically connected to a logic circuit, and the logic circuit being electrically connected to the semiconductor visual display element (See Figure 10).

Claim Rejections - 35 USC § 103

➤ The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

➤ Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parkhurst et al. (US Patent No. 5,412,372) in view of Ishii et al. and further in view of Applicant's disclosure.

Parkhurst et al., as stated supra, essentially discloses the claimed invention but fails to teach an array of GaAs light-emitting pn junctions. Regarding claims 2-3, Ishii et al. teach that a clock comprises a liquid crystal display element which is formed using GaAs and LED (column 1, lines 17-24; and column 10, lines 10-22). Ishii et al. provide motivation to use such structure in that it provides a high precision and bright display (column 2, lines 51-53). Regarding the dimension ranges disclosed by Applicant in claims 4-6, Applicant acknowledges that it is well known in the art to form such an array of pixels using GaAs (page 7, lines 20-25).

Therefore, it would have been obvious to one having ordinary skill in the art at the same time the invention was made to have modified Parkhurst et al. to include a liquid crystal display element which is formed using GaAs as taught by Ishii et al. in view of Applicant's disclosure, since such modification would result in a structure having a high precision and bright display, as described in column 2, lines 51-53 of Ishii et al.

Conclusion

➤ The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chiu et al. (US Patent No. 6,014,120) disclose LED display controller. Brady et al. (US Patent No. 5,543,988) disclose Hall sensor with high spatial resolution in two directions concurrently. Thierry (US Patent No. 6,137,165) discloses hybrid package including a power MOSFET die and a control and protection circuit die with a smaller sense MOSFET. Gupta et al. (US Patent No. 5,557,739) disclose computer system with component removal and replacement control scheme. Orava et

al. US Patent No. 5,812,191) disclose semiconductor high-energy radiation imaging device.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to José R. Díaz whose telephone number is (703) 308-6078. The examiner can normally be reached on 8:00 - 5:00 Monday through Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie C. Lee can be reached on (703) 308-1690. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

JRD
December 8, 2000


EDDIE C. LEE
ATTORNEY EXAMINER